

CLAIMS

What is claimed is:

1. A medical targeting and device introduction system, comprising:
a cannula;
an introducer stylet removably disposed within the cannula; and
a target confirmation device selectively insertable within the cannula.
2. The system of claim 1, wherein the cannula is configured to introduce at least one of a biopsy device, a site marker, an anesthesia, a fluid, a tamponade, and a hemostatic agent.
3. The system of claim 1, wherein the introducer stylet is the target confirmation device.
4. The system of claim 1, wherein the target confirmation device includes a magnetic resonance imaging (MRI) identifiable material.
5. The system of claim 4, wherein the magnetic resonance imaging (MRI) identifiable material is a band disposed proximate a distal end of the target confirmation device.
6. The system of claim 1, wherein the system is magnetic resonance imaging (MRI) compatible.
7. A biopsy system suitable for use with a magnetic resonance imaging (MRI) device, comprising:
a cannula insertable into a patient's tissue;
an introducer stylet removably disposed within the cannula and configured for tissue penetration;

a target confirmation device selectively insertable within the cannula, the target confirmation device including a magnetic resonance imaging (MRI) identifiable material; and

a biopsy device selectively insertable within the cannula.

8. The system of claim 7, wherein the cannula is configured to introduce at least one of a site marker, an anesthesia, a fluid, a tamponade and a hemostatic agent into the patient.

9. The system of claim 7, wherein the magnetic resonance imaging (MRI) identifiable material is shaped to distinguish the target confirmation device from the patient's tissue.

10. The system of claim 7, wherein the magnetic resonance imaging (MRI) identifiable material is a band disposed proximate a distal end of the target confirmation device.

11. The system of claim 7, wherein the biopsy system is magnetic resonance imaging (MRI) compatible.

12. A medical system, comprising:
an introducer stylet configured for insertion into a patient's body proximate a target site;
an outer cannula sized to fit over the introducer stylet and positionable at least partially within the patient's body after insertion and removal of the introducer stylet;
and
a target confirmation device insertable into the outer cannula after removal of the introducer stylet, the target confirmation device configured to confirm the position of the outer cannula relative to the target site.

13. The system of claim 12, wherein a distal end of the introducer stylet includes a tissue piercing member.

14. The system of claim 12, wherein the outer cannula includes an inner lumen and a fluid conduit provided in communication with the inner lumen.

15. The system of claim 14, wherein the fluid conduit includes a directional valve.

16. The system of claim 12, wherein the target confirmation device includes a proximal end having a first fitting interface that engages a second fitting interface on the outer cannula upon insertion of the target confirmation device into the outer cannula.

17. The system of claim 12, wherein the outer cannula includes a haemostatic valve.

18. The system of claim 12, wherein the target confirmation device includes a magnetic resonance imaging (MRI) identifiable material.

19. The system of claim 12, wherein the target confirmation device includes a relatively low artifact generating material.

20. The system of claim 12, further including a biopsy device that includes a handpiece and a cutting element, the cutting element defining a tissue-receiving opening for removing tissue from the target site.

21. The system of claim 20, wherein the distance between a proximal end and a distal end of the target confirmation device is approximately equal to the distance between the center of the tissue receiving opening and the handpiece of the biopsy device.

22. The system of claim 20, wherein the target confirmation device includes a targeting band.

23. The system of claim 22, wherein the distance between a proximal end of the target confirmation device and the targeting band is approximately equal to the distance between the center of the tissue receiving opening and the handpiece of the biopsy device.

24. The system of claim 20, wherein the length of the cutting element is approximately equal to the length of the introducer stylet.

25. The system of claim 20, wherein the length of the target confirmation device is approximately equal to the length of the introducer stylet.

26. A medical procedure, comprising:
inserting an introducer stylet having an outer cannula disposed thereon into a patient's body creating a pathway to a target tissue;
removing the introducer stylet from the patient's body leaving behind the outer cannula; and

inserting a target confirmation device into the patient's body through the outer cannula and confirming the location of the target tissue relative to the outer cannula.

27. The method of claim 26, further including the step of providing an image of the target tissue prior to or contemporaneous with inserting the introducer stylet into the patient's body.

28. The method of claim 26, further including the step of providing an image of the target confirmation device within the patient's body.

29. The method of claim 26, further including the step of removing the target confirmation device and inserting a biopsy device through the outer cannula to a position adjacent the target tissue.

30. The method of claim 29, further including the step of performing a biopsy of the target tissue.

31. The method of claim 30, further including the step of aspirating a biopsy site formed after removing the target tissue.

32. The method of claim 31, further including the step of inserting a medical treatment into the biopsy site through the outer cannula.